



# ONCE-THROUGH COOLING

- Legal Requirements Affecting Permitting and Operation of OTC Facilities
  - Warren-Alquist Act
  - CEQA
  - Porter-Cologne Water Quality Control Act
  - Federal Clean Water Act
  - California Coastal Act/McAteer-Petris Act
  - Federal and State Endangered Species Acts
  - Magnuson-Stevens Fishery Management and Conservation Act



# ONCE-THROUGH COOLING

- Warren-Alquist Act
  - Applies to Energy Commission jurisdictional projects - those that are 50 MW or greater
  - Requires findings on the project's conformity with applicable local, regional, state, and federal laws.
  - Includes additional requirements for projects located within the Coastal Zone
  - Provides that the Energy Commission is the Lead Agency under CEQA



## ONCE-THROUGH COOLING

- CEQA
  - Requires Lead Agency to conduct review of potential environmental impacts
  - Mitigation for significant adverse effects is required unless infeasible; override findings required for projects with significant unmitigable effects
  - Project impacts are compared to a “baseline” of existing conditions



## ONCE-THROUGH COOLING

- Porter-Cologne
  - Establishes State policy for new or expanded projects using ocean water
  - Requires “minimization” of intake and mortality of all forms of marine life by feasible measures
  - Implemented by the Regional Boards



## ONCE-THROUGH COOLING

- Federal Clean Water Act - Overview
  - Requires NPDES Permits for a broad variety of point and non-point sources
  - Section 316(a) imposes specific requirements for thermal discharge
  - Section 316 (b) imposes specific cooling water intake structure requirements



## ONCE-THROUGH COOLING

- Federal Clean Water Act - 316(b)
  - Implemented by Regional Boards as part of NPDES permit program
  - Requires “Best Technology Available” for minimizing adverse environmental impact; no baseline requirement
  - Standards for implementing BTA have been the subject of much litigation
  - New rules for existing facilities issued February 16, 2004; no decision yet in cases challenges the rules



## ONCE-THROUGH COOLING

- Federal Clean Water Act – 316(b) Standards
  - 80 – 95% reduction in impingement
  - 60 – 90% reduction in entrainment
  - 4 compliance options
  - Data submission requirements
  - Measurement requirements
  - Restoration allowed



## ONCE-THROUGH COOLING

- California Coastal Act
  - Coastal Commission provides suitability report addressing 7 specific issues
  - Energy Commission must include provisions identified by the Coastal Commission unless they are infeasible or would cause greater environmental harm
  - Specific Coastal Act policies require minimization of entrainment effects and enhancement and restoration of marine resources





# ONCE-THROUGH COOLING

- McAteer-Petris Act
  - Process for Bay Conservation and Development Commission is similar to that for the Coastal Commission
  - No policy directly addressing once-through cooling



## ONCE-THROUGH COOLING

- Other Legal Requirements
  - Federal and State Endangered Species Acts
  - Magnuson-Stevens Fishery Management and Conservation Act



## ONCE-THROUGH COOLING

- Several factors complicate review of California power plants using once-through cooling
  - Facilities are located in different marine environments and may have different types of impacts on the marine environment
  - No single agency has regulatory authority over all 21 power plants using once-through cooling
  - Different agencies have different regulatory roles